

FIG. 1

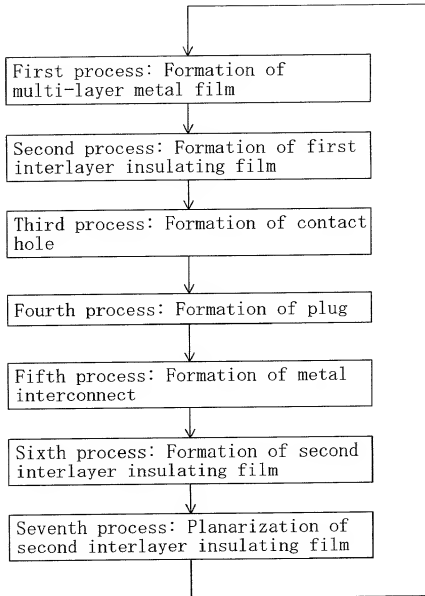


FIG. 2

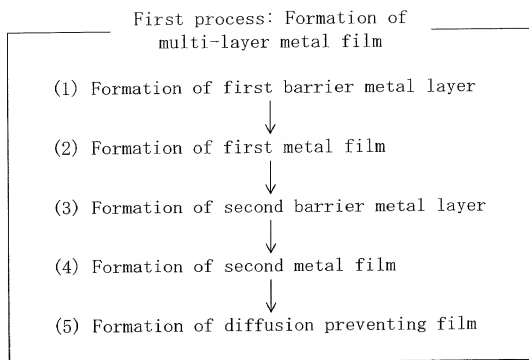


FIG. 3

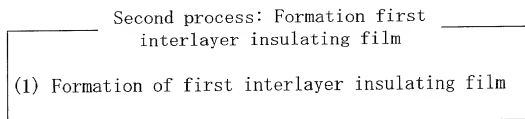


FIG. 4

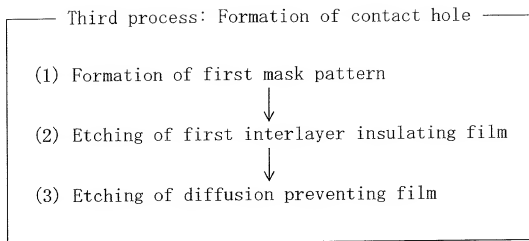


FIG. 5

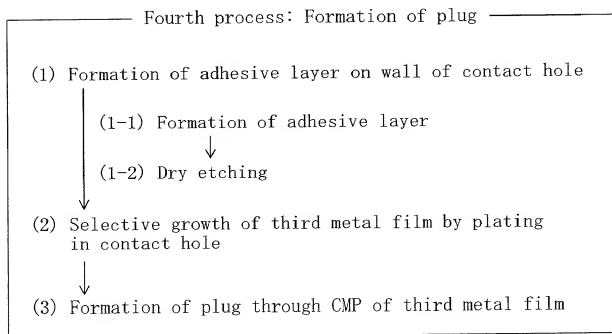


FIG. 6

Fifth process: Formation of metal interconnect

- (1) Etch back of part of first interlayer insulating film
- ↓
- (2) Formation of second mask pattern
- ↓
- (3) Etching of first interlayer insulating film
- ↓
- (4) Etching of diffusion preventing film
- ↓
- (5) Etching of second metal film
- ↓
- (6) Etching of second barrier metal layer
- ↓
- (7) Etching of first metal film
- ↓
- (8) Etching of first barrier metal layer
- ↓
- (9) Etch back of part of first interlayer insulating film

FIG. 7

Sixth process: Formation of second interlayer  
insulating film

(1) Formation of second interlayer insulating film

FIG. 8

Seventh process: Planarization of  
second interlayer insulating film

(1) Planarization by CMP



FIG. 10A

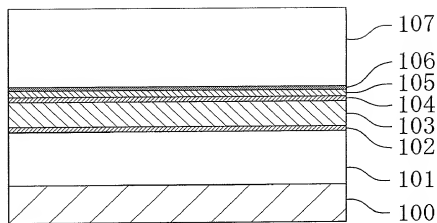


FIG. 10B

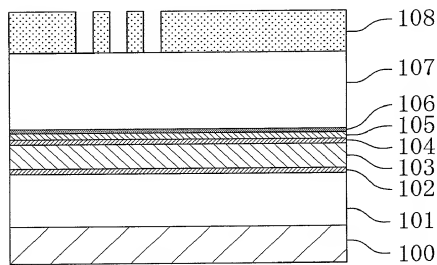


FIG. 10C

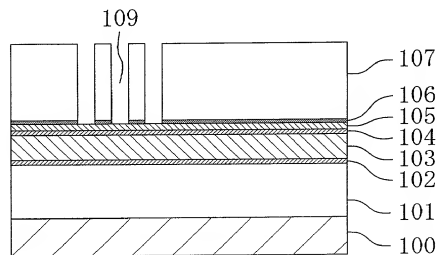


FIG. 11A

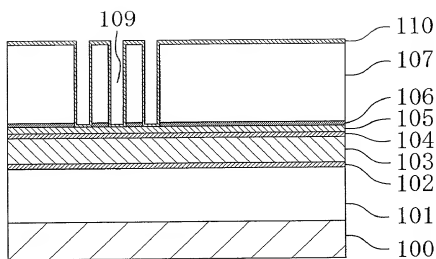


FIG. 11B

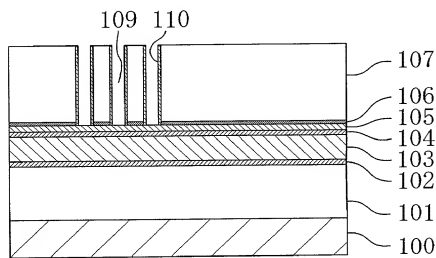
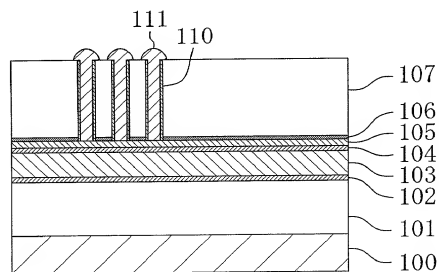


FIG. 11C



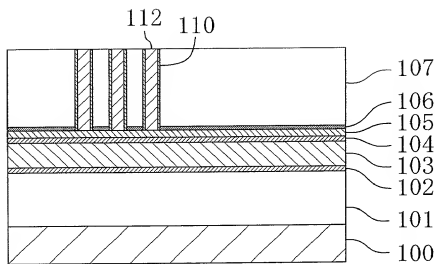


FIG. 12A

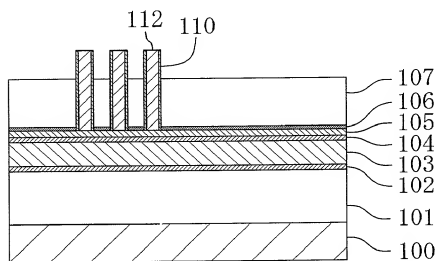


FIG. 12B

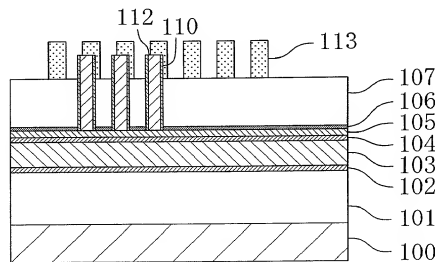


FIG. 12C

FIG. 13A

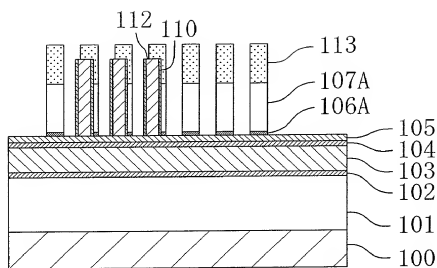


FIG. 13B

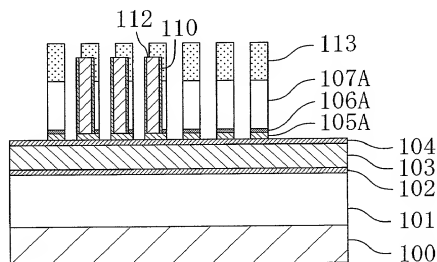
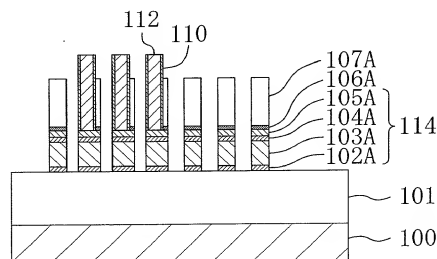


FIG. 13C



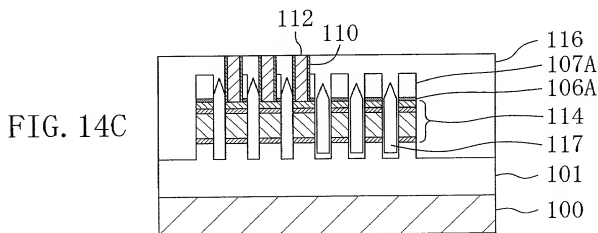
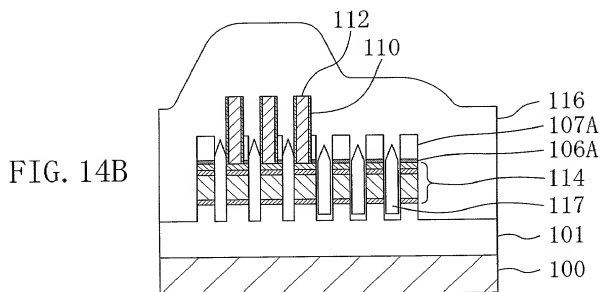
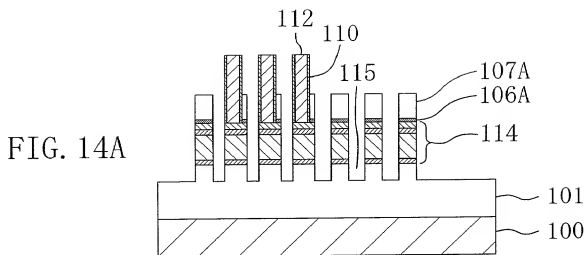


FIG. 15

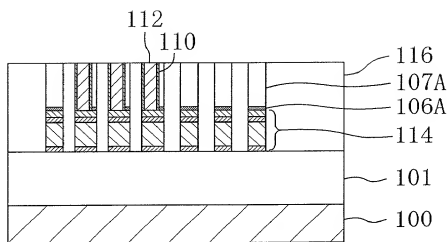


FIG. 16A

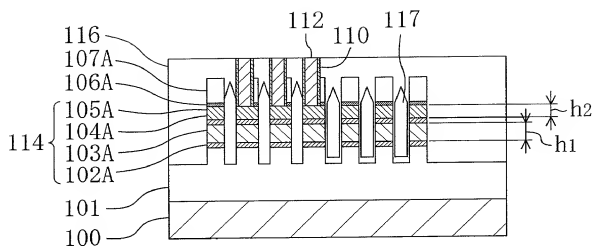


FIG. 16B

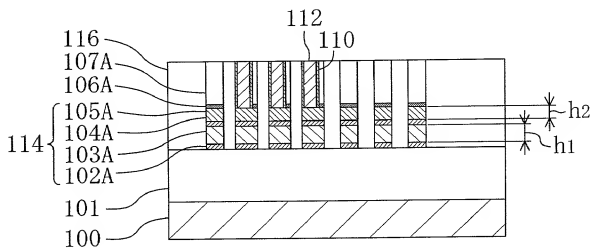


FIG. 17A  
PRIOR ART

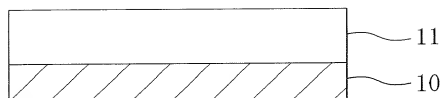


FIG. 17B  
PRIOR ART

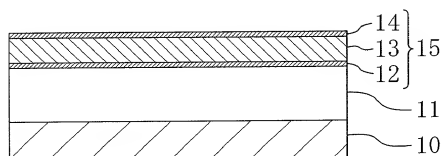


FIG. 17C  
PRIOR ART

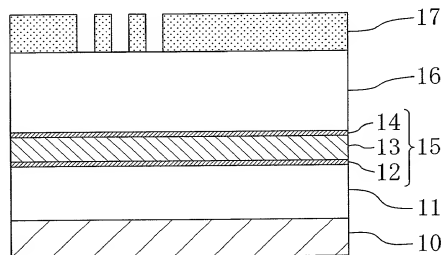
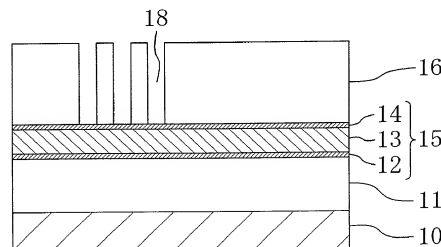


FIG. 17D  
PRIOR ART



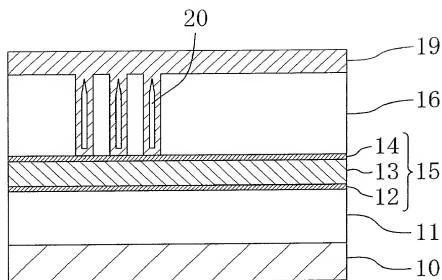


FIG. 18A  
PRIOR ART

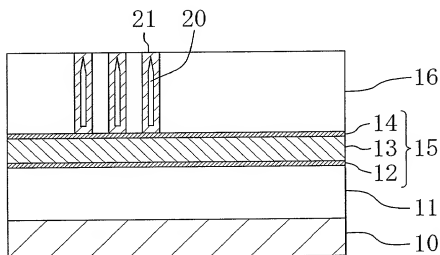


FIG. 18B  
PRIOR ART

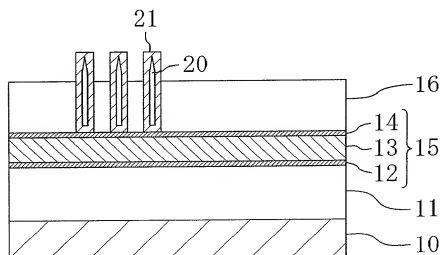


FIG. 18C  
PRIOR ART

FIG. 19A  
PRIOR ART

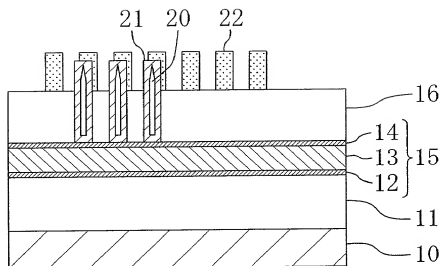


FIG. 19B  
PRIOR ART

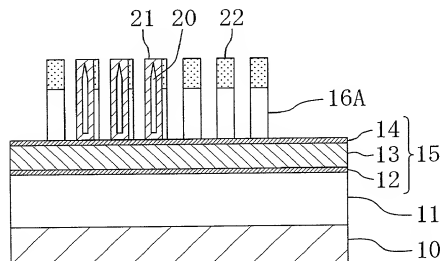


FIG. 19C  
PRIOR ART

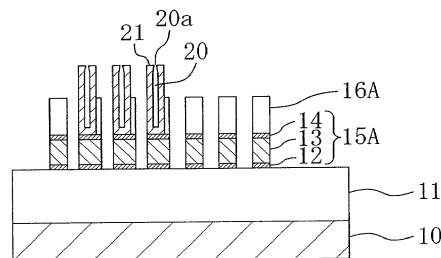


FIG. 20A  
PRIOR ART

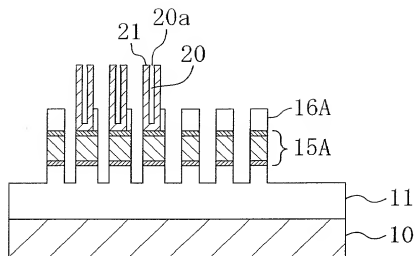


FIG. 20B  
PRIOR ART

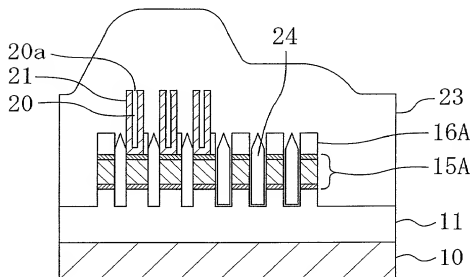


FIG. 20C  
PRIOR ART

